



# TORQ Analysis of Cost Estimators to Procurement Clerks

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Cost Estimators	13-1051.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Procurement Clerks	43-3061.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

91

Ability TORQ				Skills TORQ				Knowledge TORQ			
Level			94	Level			90	Level			90
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
No Critical Gaps Recorded!				Time Management	69	4	86	Clerical	71	15	75
				Speaking	63	2	81	Customer and Personal Service	60	9	71
				Critical Thinking	68	2	74				
				Monitoring	70	2	70				

LEVEL and IMPT (IMPORTANCE) refer to the Target Procurement Clerks. GAP refers to level difference between Cost Estimators and Procurement Clerks.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Cost Estimators	Procurement Clerks	Importance
Oral Comprehension	67	60	81
Oral Expression	67	55	81
Written Comprehension	64	53	78
Written Expression	57	48	72
Problem Sensitivity	50	46	72
Deductive Reasoning	60	50	72
Information Ordering	60	48	72
Speech Clarity	48	41	72



Near Vision	66		59		68
Inductive Reasoning	59		44		62
Speech Recognition	48		42		62
Mathematical Reasoning	57		37		53

## Skill Level Comparison - Abilities with importance scores over 69

Description	Cost Estimators	Procurement Clerks	Importance
Time Management	65	69	86
Reading Comprehension	70	66	82
Speaking	61	63	81
Active Listening	73	67	79
Writing	66	64	74
Critical Thinking	66	68	74
Monitoring	68	70	70

## Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Cost Estimators	Procurement Clerks	Importance
Clerical	56	71	75
Customer and Personal Service	51	60	71

## Experience &amp; Education Comparison

Related Work Experience Comparison				Required Education Level Comparison											
Description		Cost Estimators		Procurement Clerks		Description		Cost Estimators		Procurement Clerks					
10+ years		8%		<div><div></div></div>		0%				Doctoral		0%		<div><div></div></div>	
8-10 years		4%		<div><div></div></div>		0%				Professional Degree		0%		<div><div></div></div>	
6-8 years		9%		<div><div></div></div>		0%				Post-Masters Cert		0%		<div><div></div></div>	
4-6 years		4%		<div><div></div></div>		8%		<div><div></div></div>		Master's Degree		12%		<div><div></div></div>	
2-4 years		15%		<div><div></div></div>		26%		<div><div></div></div>		Post-Bachelor Cert		0%		<div><div></div></div>	
1-2 years		8%		<div><div></div></div>		52%		<div><div></div></div>		Bachelors		19%		<div><div></div></div>	
6-12 months		27%		<div><div></div></div>		6%		<div><div></div></div>		AA or Equiv		8%		<div><div></div></div>	
3-6 months		11%		<div><div></div></div>		3%		<div><div></div></div>		Some College		10%		<div><div></div></div>	
1-3 months		4%		<div><div></div></div>		0%				Post-Secondary Certificate		9%		<div><div></div></div>	
0-1 month		0%		<div><div></div></div>		2%		<div><div></div></div>		High Scol Diploma or GED		40%		<div><div></div></div>	
None		4%		<div><div></div></div>		0%				No HSD or GED		0%		<div><div></div></div>	
Cost Estimators						Procurement Clerks									
Most Common Educational/Training Requirement:															
Work experience in a related occupation						Short-term on-the-job training									



### Job Zone Comparison

#### 4 - Job Zone Four: Considerable Preparation Needed

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Most of these occupations require a four - year bachelor's degree, but some do not.

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

#### 3 - Job Zone Three: Medium Preparation Needed

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

### Tasks

#### Cost Estimators

##### Core Tasks

##### Generalized Work Activities:

- Communicating with Persons Outside Organization - Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.

##### Specific Tasks

##### Occupation Specific Tasks:

- Analyze blueprints and other documentation to prepare time, cost, materials, and labor estimates.
- Assess cost effectiveness of products, projects or services, tracking actual costs relative to bids as the project develops.
- Conduct special studies to develop and establish standard hour and related cost data or to effect cost reduction.
- Confer with engineers, architects, owners, contractors and subcontractors on changes and adjustments to cost estimates.
- Consult with clients, vendors, personnel in other departments or construction

#### Procurement Clerks

##### Core Tasks

##### Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Processing Information - Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

##### Specific Tasks

##### Occupation Specific Tasks:

- Approve bills for payment.
- Calculate costs of orders, and charge or forward invoices to appropriate accounts.
- Check shipments when they arrive to ensure that orders have been filled correctly and that goods meet specifications.
- Compare prices, specifications, and delivery dates in order to determine the best bid among potential suppliers.
- Compare suppliers' bills with bids and purchase orders in order to verify accuracy.
- Contact suppliers in order to schedule or expedite deliveries and to resolve shortages, missed or late deliveries, and



foremen to discuss and formulate estimates and resolve issues.

- Establish and maintain tendering process, and conduct negotiations.
- Prepare and maintain a directory of suppliers, contractors and subcontractors.
- Prepare cost and expenditure statements and other necessary documentation at regular intervals for the duration of the project.
- Prepare estimates for use in selecting vendors or subcontractors.
- Prepare estimates used by management for purposes such as planning, organizing, and scheduling work.
- Review material and labor requirements to decide whether it is more cost-effective to produce or purchase components.
- Set up cost monitoring and reporting systems and procedures.
- Visit site and record information about access, drainage and topography, and availability of services such as water and electricity.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients on financial matters
- analyze budgets
- analyze financial data
- analyze technical data, designs, or preliminary specifications
- bid engineering, construction or extraction projects
- compile data for financial reports
- compute cost estimates of construction or engineering projects
- compute financial data
- confer with vendors
- convert design specifications to cost estimates
- estimate cost for engineering projects
- estimate materials or labor requirements
- estimate production costs
- estimate time needed for project
- estimate time or cost for installation, repair, or construction projects
- evaluate material specifications
- identify supplier with best bid
- interpret maps for architecture, construction, or engineering project
- monitor operational budget
- negotiate business contracts
- prepare cost estimates
- prepare financial reports
- prepare periodic reports comparing budgeted costs to actual costs

catalogs, prices or rates delivered, and other problems.

- Determine if inventory quantities are sufficient for needs, ordering more materials when necessary.
- Locate suppliers, using sources such as catalogs and the internet, and interview them to gather information about products to be ordered.
- Maintain knowledge of all organizational and governmental rules affecting purchases, and provide information about these rules to organization staff members and to vendors.
- Monitor contractor performance, recommending contract modifications when necessary.
- Monitor in-house inventory movement and complete inventory transfer forms for bookkeeping purposes.
- Perform buying duties when necessary.
- Prepare invitation-of-bid forms, and mail forms to supplier firms or distribute forms for public posting.
- Prepare purchase orders and send copies to suppliers and to departments originating requests.
- Prepare, maintain, and review purchasing files, reports and price lists.
- Respond to customer and supplier inquiries about order status, changes, or cancellations.
- Review requisition orders in order to verify accuracy, terminology, and specifications.
- Track the status of requisitions, contracts, and orders.

#### Detailed Tasks

##### Detailed Work Activities:

- communicate technical information
- compile data for financial reports
- compute financial data
- examine documents for completeness, accuracy, or conformance to standards
- fill out business or government forms
- fill out purchase requisitions
- identify supplier with best bid
- locate sources of supply for purchasing
- maintain account records
- maintain records, reports, or files
- manage inventories or supplies
- obtain information from individuals
- operate calculating devices
- order or purchase supplies, materials, or equipment
- select materials or tools
- use computers to enter, access or retrieve data



- read blueprints
- read specifications
- understand construction specifications
- understand engineering data or reports
- understand technical operating, service or repair manuals
- use computers to enter, access and retrieve financial data
- use cost benefit analysis techniques
- use spreadsheet software
- use statistical cost estimation methods

#### Technology - Examples

##### Accounting software

- Choice Job Cost
- Cost accounting software
- CPR International GeneralCOST Estimator
- Intuit QuickBooks
- National Job Cost software

##### Analytical or scientific software

- Construction Management Software ProEst
- QSMSLIM
- Resources Calculations Incorporated SoftCost
- WinEstimator WinEst

##### Data base reporting software

- Business Objects Crystal Reports
- Software AG software

##### Electronic mail software

- Microsoft Outlook

##### Financial analysis software

- Cost estimation software
- CPR International Visual Estimator
- IBM Costimater
- Softstar Costar COCOMO II

##### Project management software

- Assured Software JPP
- Galorath SEER-SEM
- Sage Software Sage Master Builder
- Xactware Xactimate

##### Spreadsheet software

- use telephone communication techniques
- verify data from invoices to ensure accuracy
- write business correspondence

#### Technology - Examples



- Apple AppleWorks

- Corel QuattroPro

- IBM Lotus 1-2-3

- Microsoft Excel

- Spreadsheet software

Word processing software

- Microsoft Word

#### Tools - Examples

- Desktop computers

- Notebook computers

- Personal computers

- Personal digital assistants PDA

- Scanners

- Tablet computers

### Labor Market Comparison

Description	Cost Estimators	Procurement Clerks	Difference
Median Wage	\$ 44,990	\$ 33,300	\$( 11,690)
10th Percentile Wage	\$ 30,880	\$ 22,760	\$( 8,120)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,820	\$ 41,460	\$( 17,360)
90th Percentile Wage	\$ 76,320	\$ 47,510	\$( 28,810)
Mean Wage	\$ 49,830	\$ 33,970	\$( 15,860)
Total Employment - 2007	750	N/A	N/A
Employment Base - 2006	751	251	-500
Projected Employment - 2016	853	247	-606
Projected Job Growth - 2006-2016	13.6 %	-1.6 %	-15.2 %
Projected Annual Openings - 2006-2016	25	5	-20

### National Job Posting Trends

Trend for Cost Estimators

Trend for  
Procurement  
Clerks



Data from [Indeed](http://Indeed.com)

### Recommended Programs

#### General Office/Clerical and Typing Services

General Office Occupations and Clerical Services. A program that prepares individuals to provide basic administrative support under the supervision of office managers, administrative assistants, secretaries, and other office personnel. Includes instruction in typing, keyboarding, filing, general business correspondence, office equipment operation, and communications skills.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

### Maine Statewide Promotion Opportunities for Cost Estimators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
13-1051.00	Cost Estimators	100	4	750	\$44,990.00	\$0.00	14%	25
13-1023.00	Purchasing Agents, Except Wholesale, Retail, and Farm Products	93	3	920	\$45,210.00	\$220.00	-2%	21
13-2053.00	Insurance Underwriters	90	3	460	\$56,090.00	\$11,100.00	-1%	12
19-3021.00	Market Research Analysts	90	4	200	\$49,960.00	\$4,970.00	3%	2
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	89	4	930	\$55,220.00	\$10,230.00	-1%	19



41-3031.02	Sales Agents, Financial Services	89	4	0	\$65,230.00	\$20,240.00	5%	33
11-3031.02	Financial Managers, Branch or Department	89	4	2,440	\$67,670.00	\$22,680.00	7%	58
13-2031.00	Budget Analysts	89	4	170	\$57,290.00	\$12,300.00	3%	5
11-3011.00	Administrative Services Managers	88	4	1,090	\$56,630.00	\$11,640.00	5%	34
13-2051.00	Financial Analysts	88	4	210	\$71,380.00	\$26,390.00	10%	4
13-2061.00	Financial Examiners	88	4	120	\$55,110.00	\$10,120.00	3%	2
13-2052.00	Personal Financial Advisors	88	3	360	\$94,100.00	\$49,110.00	10%	13
13-2072.00	Loan Officers	88	3	1,450	\$49,380.00	\$4,390.00	9%	29
11-2022.00	Sales Managers	88	4	1,310	\$72,720.00	\$27,730.00	3%	32
13-2011.02	Auditors	88	4	3,250	\$48,110.00	\$3,120.00	11%	113

### Top Industries for Procurement Clerks

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Federal government, excluding postal service	919999	18.66%	14,519	12,352	-14.92%
Management of companies and enterprises	551100	5.35%	4,159	4,794	15.28%
General medical and surgical hospitals, public and private	622100	5.24%	4,074	4,510	10.71%
Elementary and secondary schools, public and private	611100	4.08%	3,176	3,347	5.38%
Colleges, universities, and professional schools, public and private	611300	3.27%	2,546	2,849	11.87%
Local government, excluding education and hospitals	939300	2.64%	2,057	2,311	12.34%
Building material and supplies dealers	444100	2.11%	1,640	1,887	15.01%
Grocery and related product wholesalers	424400	1.79%	1,392	1,522	9.35%
Employment services	561300	1.55%	1,205	1,525	26.57%
State government, excluding education and hospitals	929200	1.42%	1,106	977	-11.69%
Grocery stores	445100	1.36%	1,062	1,159	9.11%
Wholesale electronic markets and agents and brokers	425100	1.22%	951	971	2.13%
Miscellaneous nondurable goods merchant wholesalers	424900	1.12%	874	855	-2.15%
Junior colleges, public and private	611200	1.11%	865	860	-0.56%
Self-employed workers, secondary job	000602	1.07%	831	744	-10.40%





### Top Industries for Cost Estimators

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Nonresidential building construction	236200	9.42%	20,828	25,214	21.06%
Residential building construction	236100	8.88%	19,639	23,893	21.66%
Plumbing, heating, and air-conditioning contractors	238220	7.50%	16,592	20,243	22.00%
Electrical contractors	238210	7.22%	15,964	18,085	13.29%
Other specialty trade contractors	238900	5.27%	11,641	13,900	19.41%
Automotive body, paint, interior, and glass repair	811120	3.78%	8,358	10,543	26.14%
Drywall and insulation contractors	238310	3.11%	6,882	7,931	15.24%
Printing and related support activities	323100	2.68%	5,921	5,068	-14.40%
Architectural and structural metals manufacturing	332300	2.56%	5,662	6,533	15.39%
Roofing contractors	238160	2.41%	5,338	6,735	26.16%
Highway, street, and bridge construction	237300	2.38%	5,266	6,125	16.32%
Painting and wall covering contractors	238320	2.03%	4,489	5,397	20.22%
Building material and supplies dealers	444100	1.92%	4,252	5,870	38.06%
Automobile dealers	441100	1.49%	3,290	4,032	22.56%
Poured concrete foundation and structure contractors	238110	1.46%	3,228	3,932	21.79%